#4 03 CO

Attorney's Docket No. 035721/243744 (5721-18)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re:	Volyanoy *et al.*	Confirmation No.:	6923
Appl. No.:	10/068,570	Group Art Unit:	Not yet assigned
Filed:	February 6, 2002	Examiner:	Not yet assigned
For:	LIGAND SENSOR DEVICES AND USES THEREOF		

May 24, 2002

Commissioner for Patents
Washington, DC 20231

INFORMATION DISCLOSURE STATEMENT
CITATION UNDER 37 C.F.R. § 1.97

Sir:

Attached is a list of documents on form PTO-1449. It is requested that the Examiner consider these documents and officially make them of record in accordance with the provisions of 37 C.F.R. § 1.97 and Section 609 of the MPEP. By submitting the listed documents, Applicant in no way makes any admission as to the prior art status of the listed documents, but is instead submitting the listed documents for the sake of full disclosure.

All items are attached except those that were supplied in parent Application No. 60/266,755 filed February 6, 2001. Since the benefit of this application was claimed under 35 U.S.C. 120, no copies need to be furnished in accordance with 37 C.F.R. 1.98(d); however, copies will be furnished on request.

Respectfully submitted,

Leigh W. Thorne
Registration No. 47,992

Customer No. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Fax Charlotte Office (704) 444-1111

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231, on May 24, 2002.

Lynda-Jo Pixley

2

Substitute for form 1449A/PTO (Revised 10/2001)	Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*	Application Number	10/068,570
	Filing Date	February 6, 2002
	First Named Inventor	Vitaly Vodyanoy
	Group Art Unit	Not yet assigned
	Examiner Name	Not yet assigned
Sheet 1 of 3	Attorney Docket Number	035721/243744 (5721-18)

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear
	1	US – 4,242,096	12/30/1980	Oliveira, R., *et al.*	
	2	US – 4,314,821	02/09/1982	Rice, T.	
	3	US – 4,554,076	11/19/1985	Speaker, L.	
	4	US - 4,735,906	04/05/1988	Bastiaans, G.	
	5	US – 5,019,451	05/28/1991	Lando, J.	
	6	US – 5,102,798	04/07/1992	Guiseppi-Elie, A.	
	7	US – 5,120,809	06/09/1992	Lupo, D., *et al.*	
	8	US - 5,510,481	04/23/1996	Bednarski, M., *et al.*	
	9	US – 5,580,612	12/03/1996	Hickel, W., *et al.*	
	10	US – 5,622,699	04/22/1997	Ruoslahti, E. and Pasqualini, R.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	11	EP 0 637 384 B1	10/02/1996	Lang, H., *et al.*		
	12	WO 87/00347	01/15/1987	The Secretary of State for Defence in Her Britannic Majesty's Government of the United Kingdom of Great Britain and Northern Ireland		

Examiner Signature		Date Considered	

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449A/PTO (Revised 10/2001)	Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*	Application Number	10/068,570
	Filing Date	February 6, 2002
	First Named Inventor	Vitaly Vodyanoy
	Group Art Unit	
	Examiner Name	
Sheet 2 of 3	Attorney Docket Number	035721/243744 (5721-18)

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s) , volume-issue number(s), publisher, city and/or country where published.	T
	13	AHLUWALIA, A., *et al.*, "A Comparative Study of Protein Immobilization Techniques for Optical Immunosensors," *Biosensors and Bioelectronics*, 1991, pp. 207-214, Vol. 7, Elsevier Science Publishers Ltd.	
	14	BARRY, M., *et al.*, "Toward Cell-Targeting Gene Therapy Vectors: Selection of Cell-Binding Peptides from Random Peptide-Presenting Phage Libraries," *Nature Medicine*, 1996, pp. 299-305, Vol. 2(3).	
	15	CWIRLA, S., *et al.*, "Peptides on Phage: A Vast Library of Peptides for Identifying Ligands", *Proceedings of the National Academy of Science.* USA, August 1990, pp. 6378-6382, Vol. 87.	
	16	DECKER, J., *et al.*, "Characterization of a Human Pancreatic Secretory Trypsin Inhibitor Mutant Binding to *Legionella pneumophila* as Determined by a Quartz Crystal Microbalance," *Journal of Immunological Methods*, 2000, pp. 159-165, Vol. 233, Elsevier Science Publishers, B.V.	
	17	DELVIN, J., *et al.*, "Random Peptide Libraries: A Source of Specific Protein Binding Molecules," *Science*, 1990, pp. 404-406, Vol. 249.	
	18	EBATO, H., *et al.*, "Investigation of Specific Binding of Antifluorescyl Antibody and Fab to Fluroescein Lipids in Langmuir – Blodgett Deposited Films Using Quartz Crystal Microbalance Methodology," *Analytical Chemistry*, 1994, pp. 1683-1689, Vol. 66(10).	
	19	GIZELI, E. and LOWE, C., "Immunsensors," *Analytical Biotechnology*, 1996, pp. 66-71, Vol. 7.	
	20	FEERO, W. and HOFFMAN, E., "Toward Systemic Gene Delivery for Duchenne Muscular Dystrophy: Transferrin as a Muscle Targeting Ligand," *Neurology*, 1996, p. A390, Vol. 46(2).	
	21	HENGERER, A., *et al.*, "Quartz Crystal Microbalance (QCM) as a Device for the Screening of Phage Libraries", *Biosensors and Bioelectronics*, 1999, pp. 139-144, Vol. 14, Elsevier Science S.A.	
	22	HENGERER, A., *et al.*, "Determination of Phase Antibody Affinities to Antigen by a Microbalance Sensor System," *BioTechniques*, 1999, pp. 956-963, Vol. 26(5).	
	23	PASQUALINI, R. and RUOSIAHTI, E., "Organ Targeting *In Vivo* Using Phage Display Peptide Libraries," *Nature*, 1996, pp. 364-366, Vol. 380.	
	24	PETTY, M., "Application of Multilayer Films to Molecular Sensors: Some Examples of Bioengineering at the Molecular Level," *Journal of Biomedical Engineering*, 1991, pp. 209-214, Vol. 13.	
	25 *	POLGREN, A., *et al.*, "Identification of Muscle Homing Sequences by Using Phase Display Libraries of Peptides," 0-155, p. 77	*Ask LTH

Substitute for form 1449A/PTO (Revised 10/2001)				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*				Application Number	10/068,570
				Filing Date	February 6, 2002
				First Named Inventor	Vitaly Vodyanoy
				Group Art Unit	Not yet assigned
				Examiner Name	Not yet assigned
Sheet	3	of	3	Attorney Docket Number	035721/243744 (5721-18)

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s) , volume-issue number(s), publisher, city and/or country where published.	T
	26	RUSSELL, S., "Peptide-Displaying Phages for Targeted Gene Delivery?", *Nature Medicine*, 1996, pp. 276-277, Vol. 2(3).	
	27	SCHUMACHER, T., *et al.*, "Identification of D-Peptide Ligands Through Mirror-Image Phage Display," *Science*, 1996, pp. 1854-1857, Vol. 271.	
	28	SMITH, G. and EVANS, T., "Optimization of Thermal Performance of Langmuir-Blodgett Film Pyroelectric Devices," *Thin Solid Films*, 1987, pp. 7-13, Vol. 146, Elsevier Sequoia, Netherlands.	
	29	SMITH, G., *et al.*, "Pyroelectric Activity in Non-Centrosymmetric Langmuir-Blodgett Multilayer Films," *Thin Solid Films*, 1985, pp. 125-134, Vol. 132, Elsevier Sequoia, Netherlands.	
	30	SULEIMAN, A. and GUILBAUT, G., "Recent Developments in Piezoelectric Immunosensors," *Analyst*, 1994, pp. 2279-2282, Vol. 119.	